

<p>DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Housing—Federal Housing Commissioner</p> <p>TO: DIRECTOR, HOUSING DIVISION DIRECTOR, MULTIFAMILY DIVISION DIRECTOR, SINGLE FAMILY DIVISION</p>	<p>STRUCTURAL ENGINEERING BULLETIN NO. 1091 Rev. 3 (Supersedes issue dated January 10, 1995)</p> <hr/> <p>ISSUE DATE: January 15, 1998</p> <hr/> <p>REVIEW DATE: January 15, 2001</p>
<p>SUBJECT: 1. Item Description LPI - BEAMS</p> <p>2. Name and address of Manufacturer Louisiana-Pacific Corporation 2706 Highway 421 North Wilmington, NC 20401</p>	

This Structural Engineering Bulletin (SEB) should be filed with other SEBs and related Bulletins on materials or products as required by prescribed procedures.

The technical description, requirements and limitations expressed herein do not constitute an endorsement or approval by the Department of Housing and Urban Development (HUD) of the subject matter, and any statement or representation, however made, indicating approval or endorsement by HUD is unauthorized and false, and will be considered a violation of the United States Criminal Code, 18 U.S.C. 709.

NOTICE: THIS BULLETIN APPLIES TO DWELLING UNITS BUILT UNDER HUD HOUSING PROGRAMS. NON-HUD INSURED UNITS MAY OR MAY NOT BE IN CONFORMITY WITH THE REQUIREMENTS OF THE HUD MINIMUM PROPERTY STANDARDS.

Any reproduction of this Bulletin must be in its entirety and any use of all or any part of this Bulletin in sales promotion or advertising is prohibited.

1. General:

This Bulletin sets forth specific requirements under the Technical Suitability of Products Program for determining the eligibility of housing to be constructed under HUD mortgage insurance, or other HUD housing programs.

2. Scope:

This Bulletin applies only to the structural features of this method of construction. Final determination of eligibility is made by the appropriate HUD Field Office. Other factors considered by the Field Office will be valuation, location, architectural planning and appeal, mechanical equipment, thermal characteristics, and market acceptance. Consideration is also necessary to determine whether a specific property will qualify under the specific HUD program, when constructed according to the method outlined in this Bulletin, and where the structure is to be located.

In geographical areas subject to hurricanes, earthquakes, or other severe conditions affecting dwelling structures, the HUD Field Office shall require that additional safeguards be included in the proposed design, when necessary.

3. Minimum Property Standards (MPS):

Compliance with HUD MPS is determined on the HUD Field Office on the same basis as submissions involving conventional construction, except for the special features described in this Bulletin.

4. Inspection:

Field compliance inspections covering conventional items of construction and any special features covered in this Bulletin shall be made in accordance with prescribed procedures.

The appropriate HUD Field Office shall furnish a copy of the HUD field report shall be sent to Headquarters, Manufactured Housing and Standards Division, Office of Consumer and Regulatory Affairs, when there is:

- a. Evidence of noncompliance with any portion of the system of construction described in this Bulletin.
- b. Faulty shop fabrication, including significant surface defects.
- c. Damage to shop fabricated items or materials due to improper transportation, storage, handling, or assembly.
- d. Unsatisfactory field workmanship or performance of the product or system.
- e. Any significant degradation or deterioration of the product or evidence of lack of durability or performance.

Periodic plant inspections will be made by HUD Field Office or State Agency personnel in accordance with prescribed procedures. Factory inspection reports shall be submitted to HUD Headquarters and Field Office, upon request.

5. Certification:

The manufacturer named in this Bulletin shall furnish the builder with written certification stating that the product has been manufactured in compliance with the HUD Minimum Property Standards (MPS), except as modified by this Bulletin. The builder shall endorse the certification with a statement that the product has been erected in compliance with HUD MPS, except as they are modified by the Bulletin, and that the manufacturer's certification does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act, or under any provisions applicable to other housing programs. This certification shall be furnished to the HUD Field Office, upon completion of the property.

OUTLINE DESCRIPTION, CATEGORY II CONSTRUCTION

GENERAL:

This Bulletin provides for the use of LPI-Beams, and all wood products for floor and roof spans up to 35'-0".

PRODUCT DESCRIPTION:

The LPI-Beam is a wood structural member with laminated veneer lumber (LVL) flanges and plywood or oriented strand board web. Flange material for the GNI-Beam is either 1 1/2" x 1 1/2" or 1 1/2" x 1 3/4" Gang Lam laminated veneer lumber.

Structural 1 plywood or oriented strand board, 3/8" thick, is used for the web. It is fabricated into the beam in 4' sections which are butt-jointed and glued to form a continuous web. Plywood webs are assembled with face grains vertical.

Flange members, web members, and water-resistant glue are fed into a machine which assembles the finished product on a continuous basis. The LPI-Beam is cut to the desired length as it leaves the machine and is stored in a controlled environment to allow the adhesive to cure.

MANUFACTURING PROCESS FOR LPI-BEAM:

The LPI-Beams are manufactured in a continuous process with the following steps:

1. Web sections are glued and butt-jointed to form a continuous web.
2. LVL flange material is grooved for the web joint.
3. While applying a constant uniform flow of glue to the joint, the flanges and web are brought together through a series of vertical and horizontal rollers which apply continuous pressure to form the beam.

Finished beams are bundled and wrapped with weatherproof material and stored in such a manner as to prevent excessive weathering, glue line breakdown or deterioration of the wood components.

Design and Erections:

Design and erection of the LPI-Beams shall be in accordance with the latest edition of the Louisiana-Pacific Corporation "LPI-Beams for Roof and Floor Applications". A hole chart defining the maximum size and corresponding positions of permissible holes in web members is also including in "LPI-Beams for Roof and Floor Applications." When beams are used as simple-span members, the design shear is equal to the end reaction.

LOAD TABLES:

Tables showing allowable loads due to stress and deflection limitations are presented for size of beam as a function of span. Load tables are available from Louisiana-Pacific Corporation on request.

MANUFACTURING PLANT:

Components covered under this Bulletin will be produced in the following plant:

Louisiana-Pacific Corporation
2706 Highway 421 North
Wilmington, NC 28401

The Greensboro HUD Office will inspect this plant in accordance with prescribed procedures.

QUALITY CONTROL:

The appropriate HUD Field Office in whose jurisdiction the manufacturing plant is located shall review and approve plant fabrication procedures and quality control program, and shall report to Headquarters in accordance with outstanding instructions. The quality control program shall include field erection and supervision by the Louisiana-Pacific Corporation.

RECORD OF PROPERTIES:

The manufacturer shall provide a list of the first ten (10) properties in which the component or system is used. The list shall include the complete address or description of location, and approximate date of installation or erection. Failure of the manufacturer to provide HUD with the above information, may result in cancellation of this Bulletin.

NOTICE OF CHANGES:

The manufacturer shall inform HUD in advance of changes in production facilities, transportation, field erection procedures, design, or of materials used in the product. Further, the manufacturer must inform HUD of any revision to corporate structure, change of address or change in name or affiliation of the prime manufacturer. Failure of the manufacturer to notify HUD of any of the above changes, may result in cancellation of this Bulletin.

EVALUATION:

This SEB shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this SEB shall apply for a renewal or revision 90 days prior to the Review Date printed on this SEB. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this SEB may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the SEB. HUD will notify the manufacturer that the SEB may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,

2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice, of the specific reasons for cancellation, and the opportunity to present views on why the SEB should not be canceled. No refund of fees will be made on a canceled document.

This Structural Engineering Bulletin is issued solely for the captioned firm
and is not transferable to any person or successor entity.
